

REMARKS

Please reconsider the present application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering the present application.

I. Disposition of Claims

Claims 1-18 were pending in the present application. By way of the Response to the Restriction Requirement of May 13, 2003, claims 1-8 were withdrawn from consideration. By way of this reply, claims 9, 10, and 15-18 have been amended and claims 19-28 have been added. Accordingly, claims 9-28 are currently presented for examination.

II. Claim Amendments

Claims 9, 10, and 15-18 have been amended to include the steps of (i) separating the resist layer from the resin layer and (ii) imidating the polyimide of the resin layer. Further, these claims have been amended to remove the "wherein the etching solution does not comprise an amine compound" language. No new matter has been added by way of these amendments as support for these amendments may be found, for example, on page 13, lines 10 – 12 of the Specification.

III. New Claims

New claims 19-28 have been added. No new matter has been added by way of these amendments.

IV. Drawings

Figures 3a and 3b have been amended to accurately indicate that element 51 is a benzene ring. No new matter has been added by way of these amendments as support for these amendments may be found, for example, on page 4, lines 11 – 15.

V. Rejection(s) Under 35 U.S.C § 112

Claims 9, 10, and 15-18 of the present application were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Specifically, the Examiner found claims 9, 10, and 15-18 as being unclear as to how an etching solution that comprises a quaternary ammonium hydroxide does not comprise an amine compound. By way of this reply, claims 9, 10, and 15-18 have been amended to remove the “wherein the etching solution does not comprise an amine compound” limitation. Thus, as these amendments address the concern set forth by the Examiner, withdrawal of this rejection is respectfully requested.

VI. Rejection(s) Under 35 U.S.C § 103

Claims 9-18 of the present application were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,218,022 issued to Suzuki et al. (hereinafter “Suzuki”), U.S. Patent No. 5,441,815 issued to Li et al. (hereinafter “Li”), U.S. Patent No. 5,004,777 issued to Hallden-Abberton et al. (hereinafter “Hallden-Abberton”), and/or U.S. Patent No. 4,369,090 issued to Wilson et al. (hereinafter “Wilson”). For the reasons

set forth below, this rejection is respectfully traversed.

In the present invention, a resist layer is separated from a resin layer after etching to dispose the surface of the resin layer. The resin layer, the surface of which is disposed, is further imidated, thereby resulting in the resin layer being at least substantially imidated. Accordingly, amended independent claims 9, 10, and 15-18 require, in part, (i) separating the resist layer from the resin layer and (ii) imidating the polyimide of the resin layer.

Suzuki, which is directed to a resin etching solution (*see* Suzuki, Abstract), and Li, which is directed to a process for producing a removable polyimide film (*see* Li, Abstract), are silent as to separating a resist layer from a resin layer after etching and further imidating the polyimide resin. If the polyimide of Wilson or Hallden-Abberton is used in the etching process of Suzuki or Li, the polyimide must be completely imidated after etching to satisfy the strength of the resin layer. However, the polyimide film of Suzuki is etched while copper foils or a masking tape are arranged on both surfaces of the polyimide film (*see* Suzuki, examples 2, 6, and 16-19). Further, Applicant notes there is no disclosure of removing the copper foils or the masking tape after etching. In other words, both surfaces of the polyimide film are covered. If the polyimide film of Suzuki is completely imidated after etching, the solvent cannot be removed because both surfaces of the polyimide film are covered. Thus, the process of Suzuki, even when viewed in the teachings of Li, Hallden-Abberton, and Wilson, fails to disclose the present invention as claimed in amended independent claims 9, 10, and 15-18 of the present application.

In view of the above, Suzuki, Li, Hallden-Abberton, and Wilson, whether

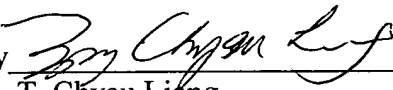
considered separately or in any combination, fail to show or suggest the present invention as recited amended independent claims 9, 10, and 15-18 of the present application. Thus, amended independent claims 9, 10, and 15-18 are patentable over Suzuki, Li, Hallden-Abberton, and Wilson. Dependent claims are allowable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

VII. Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places the present application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 03310.018001).

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Respectfully submitted,

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